

Patent Claims

1. A method of carrying out quality control for an analysis process, which belongs to a group of related analysis processes that can be carried out in at least one analyzer and respectively comprise a chain of sub-processes, containing the following features:

- fundamental chemical and/or physical basic sub-processes for the group are stored in a first database,
- at least a part of the chain of the analysis process is represented by specifying one of the basic sub-processes, per sub-processes of the part of the chain, using at least one control parameter and at least one associated threshold value,
- measurement values of the control parameters are determined for at least one run of the analysis process, and the measurement values are compared with the associated threshold values for the quality control.

2. The method as claimed in claim 1, characterized in that the analysis processes comprise chemical and/or biochemical analysis processes.

3. The method as claimed in claim 1 or 2, characterized in that at least one of the basic processes is used repeatedly for the representation.

4. The method as claimed in one of claims 1 to 3, characterized in that the part of the chain contains only the quality-relevant sub-processes.

5. The method as claimed in one of claims 1 to 4, characterized in that the representation is aided by a correspondingly designed graphical user interface.

6. The method as claimed in claim 5, characterized in that the graphical user interface aids the representation by drag-and-drop techniques, drop-down lists and/or checking list elements with a mouse click.

7. The method as claimed in one of claims 1 to 6, characterized in that the represented part of the chain is stored with the control parameters and threshold values in a second database.

5 8. The method as claimed in one of claims 1 to 7, characterized in that associated measurement values lying above or below the threshold values are evaluated during the comparison.

9. The method as claimed in one of claims 1 to 8,
10 characterized in that a run of the analysis process is terminated if one of the measurement values violates a predetermined relation with respect to the associated threshold value during the comparison.

10. The method as claimed in one of claims 1 to 9,
15 characterized in that the measurement values and/or the results of the comparison are stored.

11. The method as claimed in claim 10, characterized in that a reference of a run of the analysis process and/or a reference of at least a part of the analyzer is
20 also stored.

12. The method as claimed in one of claims 1 to 11, characterized in that the measurement values and/or the results of the comparison for a plurality of runs of the analysis process are stored and/or statistically
25 evaluated.

13. The method as claimed in one of claims 1 to 12, characterized in that the measurement values and/or the results of the comparison are stored in a third database.

14. The method as claimed in one of claims 1 to 13,
30 characterized in that the measurement values and/or the results of the comparison are used to assist maintenance of the analyzer and/or to provide feedback about a manufacturing processes of at least parts of the analyzer.

15. A device for carrying out the method as claimed in
35 one of claims 1 to 14, characterized in that the device comprises the analyzer for carrying out the analysis

process.

16. The device as claimed in claim 15, characterized in that the device comprises a computer workstation.

17. The device as claimed in claim 16, characterized in that the computer workstation can be connected to the analyzer.

18. The device as claimed in claim 17, characterized in that the analyzer and the computer workstation can be connected together via an electrically engineered data connection, especially the Internet.

19. The device as claimed in one of claims 16 to 18, characterized in that the first database can be stored in the computer workstation.

20. The device as claimed in one of claims 16 to 19, characterized in that the computer workstation is designed for representing the part of the chain and/or for the statistical evaluation.

21. The device as claimed in one of claims 15 to 20, characterized in that the second database and/or at least parts of the third database can be stored in the analyzer.

22. The device as claimed in one of claims 15 to 21, characterized in that the analyzer is designed for determining the measurement values.

23. The device as claimed in one of claims 15 to 22, characterized in that the analyzer comprises a base unit and subunits, especially disposable sensors, which can be put into the base unit.

24. The device as claimed in claim 23, characterized in that the subunits are provided with an electronic memory chip.

25. The device as claimed in one of claims 23 and 24, characterized in that the second database and/or at least parts of the third database can be stored in the subunits.

26. The device as claimed in one of claims 23 to 25, characterized in that a reference of the respective subunit can also be stored in the third database.

27. The device as claimed in one of claims 15 to 26, characterized in that the analyzer is intended for analyzing at least one substance in a bodily fluid of a living being.